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ABSTRACT

Several new school finance reform issues are emerging that require further analysis. The first issue is the impact of previous school finance reforms especially regarding their fiscal, programmatic, and governance effects. More analysis is also needed of the effects of the composition of the property tax base and the structure of state equalization formulas. Another emerging issue is the possible disequalizing effect of school finance reforms on central city districts and minority and poor children. More work is also needed on calculating differential education costs with special attention to the separation of supply and demand variables and clear identification of the optimization model used. More research is needed too on the relationship between state categorical aid programs and state general aid programs especially regarding the effects of equalization formulas and the rapid increase in categorical aid program cost. The effect of federal aid on school finance structures needs further analysis with a focus on the frictions between state and federal programs. Finally, research is needed on the symbiotic relationships between school finance and state and local tax policies including issues relating to equity, comprehensive tax reform, and the redistributive aspects of public education. (Author/JM)

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OCCASIONAL PAPER #7

RE: SCHOOL FINANCE REFORM: EMERGING ISSUES AND NEEDED RESEARCH

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RE: SCHOOL FINANCE REFORM: EMERGING ISSUES AND NEEDED RESEARCH

School finance and the inequities existing in state school finance structures have been researched throughout the twentieth century. As early as 1905, Cubberley[1] identified many of the basic elements constituting inequitable state mechanisms for allocating general state aid for public elementary and secondary schools. Those findings were further researched and the development of new state education aid policies were conducted from the 1920s through the 1950s by numerous persons, including Strayer and Haig,[2] Johns[3] and Mort.[4]

Beginning in the 1960s a series of studies investigating the socioeconomic determinants of local school district tax and expenditure policies was initiated.[6] These studies showed that, despite alleged state equalization aid programs, local school district expenditure and tax policies could be explained by local school district socio-economic phenomena, such as median family income, property wealth per pupil, percent unemployed, median years of schooling of the adult population and public school students as a percent of total population. The determinant studies were able to explain tax and expenditure inequities among school districts within a county[7] or state,[8] among central city school districts across states,[9] among suburban school districts[10] and between central city and suburban school districts.[11]

Legal analysis entered the school finance research arena in the late 1960s and early 1970s. The pioneering work of Wise[12] and Coons, Clune and Sugarman,[13] building on the preceeding decade's determinant studies, led to the landmark Serrano v. Priest opinion

of the California Supreme Court in August, 1971 stating that an education finance structure in which the quality of education opportunity was a function of local school district wealth violated the 14th Amendment of the U.S. Constitution. Although that decision was ultimately overturned by the U.S. Supreme Court in its March, 1973 decision in San Antonio Independent School District v. Rodriguez, litigation has continued in state courts[14] and legal research on school finances issues continues to help shape school finance reforms.[15]

With the Serrano decision as a catalyst, numerous studies of state school finance policies were conducted in the early 1970s.[16] Most of these studies focused on analyzing the relationships between local tax and expenditure policies and local wealth and the development of more effective state equalization aid policies.

However, this time period also experienced the refreshing additional influx of economists and political scientists into school finance research activities. Thus, also at this time school finance research began to include directly many tax issues related to school finance reform[17] as well as the politics of changing education finance structures. It was learned that, indeed, politics and education were inextricably linked[18a] that the politics of school finance reform were complicated[18b] and that school finance changes were most likely to occur through legislative action than voter referenda.[19]

Although fundamental school funding changes have been enacted in nearly half of the fifty states since 1970, education finance

reform is not a once and for all proposition. Indeed, the broad range of economic and political issues related to public education finance is not only making this public policy issue increasingly complex but also is broadening the issues involved in and characterizing school finance reform activities. The remainder of this article discusses six relatively new issues involved in current debates over education finance policies, notes the research related to them and summarizes the areas for which additional research is needed.

Impact of School Finance Reform

Although nearly twenty-five states have enacted major school finance reforms during the 1970s and although these reforms have received national acclaim by legislators, scholars and citizens, very little research exists on the impacts of these reforms. Such research is vitally needed. Rhetoric has far too long characterized the substantive issues surrounding education finance policies and recent advances in legislatively enacted school funding changes need to be researched vigorously to determine empirically whether historical inequities have been remedied.

Descriptive information on recent school finance reforms are available in publications from the National Conference of State Legislators (NCSL) and the Education Commission of the States (ECS).[20] Callahan and Wilken[21] have recently produced an overview of the effects of new school finance laws in seven states -- Florida, Illinois, Kansas, Michigan, New Mexico, Utah and Wisconsin. This study, using data for the year before and the year after the reforms,

found that the school funding changes in these states reduced expenditure and tax rate gaps among school districts within states and reduced absolutely the property tax burden in many states. The study also found, however, that state aid programs of the power equalizing or guaranteed tax base type were the least effective in reducing expenditure per pupil differences. Hickrod[22] has produced a detailed study of the fiscal effects of the Illinois reform and Phelps[23] a similar study for Michigan. Beyond these studies, however, very little analytic material exists.

Additional research is needed to determine the long run fiscal effects of various kinds of school finance reforms.

Of particular interest is the relative fiscal impacts of power equalizing (or guaranteed tax base or guaranteed yield programs) versus foundation or other kinds of school finance state aid structures. The National Institute of Education (NIE) has recently awarded a grant to the Rand Corp. to investigate these issues further but data on the fiscal impacts of school finance is needed from more than just one additional study.

The programmatic effects of school finance reform also need more researching. Although both Kirst[24] and Barro and Carrol[25] found that increases in state aid are primarily on expanded education programs, the programmatic effects of school finance reform is virtually an untouched research area. The effects of reforms on student outcomes, moreover, is a completely unknown.

Demands for information in both these areas are increasingly being made in state legislative halls and answers, if only partial,

are needed.

Information on the governance effects of school finance reform, now also known, will be provided by one NIE study being conducted at the Stanford Research Institute and another NIE supported effort at the National Jrban Coalition on school site lump sum budgeting. But the governance implications of school finance reform and the effects of fiscal centralization on local control are also areas in need of additional research.

School District Fiscal Behavior

Historically, inequities in state school finance structures have been characterized by the relationships between school district total assessed valuation per pupil and school tax rates and expenditure levels. As economists have entered the school finance arena, however, definitions of what constitutes school district wealth have broadened, the composition of the property tax base as well as its total size has been shown to be important and the precise structure of state equalization aid formulas is now known to have significant effects on school district fiscal behavior.

Bowman,[25] Wade[26] and Ladd[27] have shown quite conclusively that the composition of the property tax base influences school district decisions on expenditure and tax rate levels. All these studies have indicated that the greater the non-residential component of the property tax base, the higher the expenditure levels. This occurs because for each dollar of educational revenue raised, citizens in a district with a concentration of non-residential property pay proportionately less than taxpayers in a primarily residential school dis-

trict. Although this phenomenen is the result, in part, of a tax rate illusion -- some amount of the property taxes on non-residential property is shifted to residents -- it nevertheless has been documented empirically by these studies.

Grubb and Michelson[28] and Feldstein[29] have carried this line of research farther in examining both wealth and price effects on school district fiscal decisions caused by the nature of the state general aid formula, the composition of the tax base as well as the income of the school districts. They have shown that matching grants, of which power equalizing and guaranteed tax base programs are examples, have dramatically different effects depending on the percent at which state aid matches local revenues.

These issues are important for a number of issues. First, wealth neutrality in school finance structures can be created only when the composition of the tax base as well as the income of school districts are somehow taken into consideration in designing state equalization formulas. Second, these studies indicate, at least partially, that wealth neutrality may be accomplished only if non-residential property is removed from the local tax rolls and taxed at the state levels; this would be a radical change in most states and has been suggested in only heavily veiled terms in school finance reform activities. Third, the level of state matching aid may be more important than previously thought.[30] Fourth, models of school district fiscal response to changes in state aid structures are needed for school finance computer simulations to enable them to predict more accurately the local effects of alternative state aid

structures as well as the extra c ost to the state.

An NIE supported study at th e Rand Corporation is currently being conducted on these issues a s well as NIE supported research at ECS and a Ford Foundation fina nced study by an economist at the State University of New York at B inghamton. Again, however, this is a new issue in school finance for which some partial results have been produced but for which much more work needs to be done.

The Impact of School Finance Refo rm on Urban School Districts and Minority and Poor Children

The recognition of the socia l and economic changes that have occurred between central cities a nd their suburbs and the quest for equal education opportunity for m inority and low-income children that began in the 1960s have had significant effects in the school finance arena. Berke and Callaha n[31] were quick to note that many standard school finance reforms w ould result in decreased state aid to many central city school d istricts. Callahan, Wilken and Sillerman[32] demonstrated that alt ernative measures of school district wealth, incorporating income as w ell as property measures, were more comprehensive and more beneficial to cities than the standard assessed valuation of property per pupil. More recently, Odden[33] has made the same points. Levin[34] and the Pot omac Institute[35] discussed the higher costs of education in cent ral city schools; Chambers, Odden and Vincent,[36] using more advance d economic techniques, have shown that cost of education indices ar e the highest in central city school districts. Finally, Bothwell, Jo hnson and Hickrod[37] have analyzed in detail the effects on central cities of many recent school funding

changes. On the other hand, Netzer[38] has challenged some of the claims for central city "municipal overburden" showing that while some cities may be overburdened others may be "underburdened."

The impact of school funding structures on central city school districts is clearly a topic that will pervade school finance reforms as well as school finance research. Are all central cities alike? If not, what are the critical differences? Is municipal overburden a viable concept? How precisely do noneducation demands on city budgets impact the ability to support public education? Can alternative measures of school district wealth in state aid formulae be defended as rational? What is the best way to compensate city school districts with concentrations of special education students, low-income and minority students? These are questions that still do not have definitive answers which will be affecting school finance in the future.

The relationships between school finance structures and minority and low-income students is another relatively new issue in school finance. Minority and low-income students often are not concentrated in properly poor school districts.[39] As with city school districts, therefore, standard school finance reforms may adversely affect school districts with many minority and low-income students. In addition, the fiscal characteristics of school districts that have concentrations of Spanish-surnamed students are often different from those with concentrations of Black students.[40]

The interplay between school finance and minority education

is receiving close attention in four states -- California, Colorado, New Jersey and Texas -- through projects funded by the National Urban Coalition. NIE has also awarded the Intercultural Development Research Association in Texas a grant to study the effects of school finance reforms on minority and low-income students in six states: California, Colorado, Michigan, New Jersey, New Mexico and Texas. For the next many years the impact of school finance programs on minority and poor children will be given increased attention.

Cost of Education Indices

It is well known that the cost of providing a given level of education services differs among regions and school districts within a state. The identification of differential education costs hinges on separating supply, i.e., cost variables, from demand, i.e., quality variables and, holding quality constant, calculating the cost differences caused by supply factors.

The quantification of cost differences has assumed increasing importance among the states and research is proceeding in this area. The early work in this area, typified by Wasserman,[41] did not rely on economic theory for its analysis and either made no attempt to separate demand/quality variables from supply/cost variables or essentially made arbitrary assumptions on demand versus supply issues. Recently, Brazer,[42] Frey[43] and Grubb[44] attempted to quantify differential education costs utilizing basic supply and demand economic theory. Although Brazer specified supply and demand variables, he did so without explicitly delineating his economic model of optimization of local school resource allocation. Thus, in the end,

he was forced to make arbitrary decisions on which variables to place into which category. Frey's work found that alternative wages were the major determinant of differential teacher salaries. Although he explicitly separated demand and supply variables, his alternative wage variable is essentially a labor market regional variable and thus provides no new insights. Grubb's work is the most thorough of these three studies; he clearly identified his optimization model and thus was on firm ground in separating supply and demand variables.

The above three studies, however, used the school district as the unit of analysis rather than individual teachers or other staff persons, did not account explicitly for the impact on costs of different student needs and did not control for cost constraints on school districts with declining enrollments caused by teacher tenure and seniority laws.

Chambers, Odden and Vincent,[45] in a study of cost differentials among school districts in Missouri, used a sample of teachers as the unit of analysis in quantifying differential teacher costs and controlled for student need differences in quantifying total differential costs of education. Though additional research is needed, as indicated in the Missouri study, the development of cost indices may also produce pupil weights for special and compensatory education, quantification of economies and diseconomies of scale and the effect of collective bargaining on teacher salaries.[46]

NIE recently granted a research award on cost of education indices to and Chambers, Odden and Vincent

will be conducting additional research in Missouri during 1977. Numerous states, moreover, may fund cost-index studies as part of recently started major school finance studies.

Categorical Versus General State Aid

With the expansion, both in terms of numbers as well as financial resources, an emerging issue in school finance is the relationship between state categorical aid programs and state general aid programs. There are two basic issues involved. The first concerns the equalization or wealth neutrality aspects of state categorical aids. Recent evidence suggests that wealth related inequities can creep into the categorical aid structure if the aid is allocated on a flat-grant or excess cost reimbursement basis.[47] More wealth neutrality results when an equalization formula is used.[48]

Although there are unique characteristics of each of the various categorical educational programs, the rationale for the use of equalization formulas for state general aid hold, in the main, for categorical aid as well. In the total picture, moreover, equalization gains accomplished through the general aid program can be offset, in some cases dramatically, by wealth inequities in the flow or nonflow of aid for special education, vocational education, transportation, capital construction and debt service.

In this light, the increasing utilization of pupil weighted programs, in which students needing extra educational services are given a weight higher than the "standard" student with state aid being allocated on the basis of the number of weighted students through a general equalization formula, may be the most promising mechanism for accomplishing wealth neutrality goals for both cate-

gorical and general aid programs.[49] Leppert currently is conducting, under NIE sponsorship, further investigation of pupil weighted programs. Similar studies will be conducted in at least Missouri and West Virginia over the next year.

The second important aspect of general versus categorical aid is simply the increase in both state and local dollars for categorical services. In some states, categorical finance demands exceed -- absolutely -- the state aid for general purposes.[50] In most states, moreover, the increase in the costs of categorical aid programs, especially special education, doubles and triples in less than half a decade. The point is simply that the rapid proliferation of categorical services has put increased strains on the state budgets and that future school finance analysis should analyze in a more wholistic manner both state and categorical aid programs.

The Federal Role in School Finance

Although there was activity in the early 1970s that indicated the federal role in school finance might be expanded greatly, the federal role has remained relatively stable for the last decade, focusing on a few selected programs.[51] Little analysis exists on the nature of federal aid in school finance structures. Berke and Kirst,[52] investigating 1967 federal aid flow, concluded that federal aid, especially Title I of the ESEA, was equalizing on the basis of median family income and related to need as measured by concentration of minority students. Ginsberg and Killalea,[53] analyzing 1970 federal aid, concluded that Title I flowed to districts with concentrations of poverty students, that impact aid under P.L. 874

was equalizing with respect to property wealth and that other discretionary federal funds flow most heavily to city school districts and districts with the greatest concentration of poverty students. No other major studies of federal aid exist.

Yet there are rapidly emerging problems with federal aid programs. In many states, school finance reforms compensate low-property wealth districts; unless federal impact aid under P.L. 874, which also goes to low-wealth districts, can be included in the state allocation mechanism, it can have a disequalizing impact.[54] There are increasing problems with the comparability requirements of ESEA Title I aid and state funded programs of compensatory education. States are also concerned with the new federal handicapped education law which allocates aid directly to local school districts. Currently, the federal law ignores local school district wealth as well as the degree to which sufficient state funds have been made available for special education services.

There is a great need for research on the precise nature of the intergovernmental aid frictions that exist between federal and state aid programs in similar areas. The nature of the problem will undoubtedly differ from state to state and, thus, the nature of federal policy alternatives may have to be differentiated among states. While federal policy has errored in being developed to an excessive degree on the basis of the worst policies among the states, it is also true that some states do need a federal prod and that all states should not be given federal block grants which they decide unilaterally how to allocate. Over the next few years, the federal role in education

finance will come under close scrut iny and sound policy research is needed to help develop new federal policies on the basis of a firm, analytic foundation.

School Finance and State/Local Tax Policy

Historically ignored, the symbi iotic relationships between school finance and state/local tax policies is being increasingly realized among school finance scholars and policymakers. All three of the most recently conducted state school finance studies included detailed studies of the state and local tax structure used to finance education.[55] There are four major issues relating school finance and tax policy.

The first is the equity, in terms of the burden by income class, of the education tax structure. State tax structures, in general, are regressive overall, the progressivity of state income taxes being offset by the regressivity of the consumption taxes.[56] The hottest debate in tax incidence analysis, however, concerns the burden of the property tax. Long claimed to be regressive,[57] recent analysts have claimed, based on new economic theories, that the tax may, in fact, be progressive in incidence.[58] But research in four states shows that, regardless of theoretical perspective, the property tax places a regressive burden on low-income families and individuals.[59] Clearly, however, additional research on tax incidence is needed investigating not only statewide incidence but incidence within and among different regions in a state.

A second tax issue relates the equity of the education tax structure to its revenue-raising capabilities. Regressive taxes

tend to be inelastic; progressive taxes tend to be inelastic with respect to personal income. Since education expenditures tend to at least keep pace with growths in personal income, an inelastic education tax structure will produce annual education revenue gaps which can be closed only by cutting school programs or increasing tax rates.[60a] This issue has received very little attention and greater knowledge of it and the development of policies to deal with it are areas in need of more research.

Third is the i-sue of school finance and comprehensive tax reform. States are increasingly enacting circuit breaker programs of property tax relief to reduce property tax regressivity.[60b] Expanded circuit breaker programs that limit property tax payments as a percent of income for all low-income households have been enacted as complementary aspects of school finance reform in at least three states -- Michigan, Minnesota and Wisconsin. The interplay between circuit breakers and fiscal decisions of school districts with concentrations of low-income households is an important arena for needed research. In addition, the net impact by income class by income source of property tax relief or reduction financed by expanded state taxes needs to be examined more closely.[61]

Last is the emerging interest in the redistributive aspects of public education, an issue which requires the linking together of the expenditure and tax side of school finance. This issue has been researched recently in New York[62] and may be analyzed in California but is one of the questions that may be asked of the total education finance structure over time.

Conclusions

The above represent some of the most pressing research needs in school finance. There are clearly other important issues: collective bargaining, declining enrollments, the changing age patterns in the country's population, etc. School finance today embraces a wide variety of issues to which the disciplines of economics, political science, law and sociology must be applied for analytic research and policy development. Even though school finance today is an increasingly complex public policy issue it is refreshing, indeed, to see the numbers of first-rate scholars from many fields applying their skills and training to important research i-sues in school finance. If the progress in school finance reform during the last decade can, at least in part, be attributed to the refreshing influx of these new analysts, the latter half of the 1970s and the 1980s should produce even greater advances.

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